US Army Corps of Engineers

Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice

Public Notice Number: 200200410
Date: November 24, 2003
Comments Due: December 24, 2003

In reply, please refer to the Public Notice Number

TO WHOM IT MAY CONCERN:

SUBJECT: Applications for a Department of the Army permits under authority of Section 404 of the Clean Water Act to discharge dredged or fill material into waters of the United States, including wetlands, (waters), for the North Vineyard Station Specific Plan (NVSSP/Plan) Drainage Master Plan (DMP) (Corps ID# 200300245), Vineyard Creek (Corps ID# 200300251), and Vineyard Pointe (Corps ID# 199300651), projects, as shown in the attached drawings.

APPLICANTS:
NVSSP DMP Project - George Booth, Sacramento County, Department of Water Resources, 827 7th Street, Room 301, Sacramento, CA 95814-2406

Vineyard Creek and Vineyard Pointe Projects - Bob Shattuck, Lennar Communities, Inc., 2240 Douglas Blvd., Suite 200, Roseville, CA 95661-3875

LOCATION: The proposed North Vineyard Station Drainage Master Plan (DMP), Vineyard Pointe, and Vineyard Creek projects are within the NVSSP, in Sacramento County, California. The DMP also appears to extend outside the NVSSP area. Specifically, the DMP project is within Sections 31, 32, Township 8 North, Range 6 East, and Sections 1, 4, 5, 6, & 8, Township 7, Range 6 East, MDB&M. Additionally, the Vineyard Creek project is in Section 6, Township 7 North, Range 6 East, MDB&M, and the Vineyard Pointe project is located in Section 5, Township 7 North, Range 6 East, MDB&M. See Figures 1, 9 & 13.

PROJECT DESCRIPTIONS: The proposed projects would result in adverse effects to 25.12 acres of waters. Approximately 12.13 acres, comprised of 10.32 acres of vernal pools, 0.94 acres of seasonal wetlands, 0.03 acre of wetland swale, and 0.84 acre of pond, would be permanently affected. Additionally, 12.99 acres of temporary direct impact would occur to Gerber and Elder Creeks. These totals reflect the combined impacts of all three projects, as described below. Additionally, 72.22 acres of wetlands and other waters have been mapped within the NVSSP area (Figures 6 & 7). The applicants have provided the following project descriptions.

<u>NVSSP DMP</u>

The Corps has not verified wetland delineations for the entire NVSSP DMP area. These impacts are based on wetland delineations within the project area that have been verified by the Corps, currently being verified by the Corps, and wetland delineations based on aerial photo interpretation. The proposed DMP project would result in the adverse impacts to 15.71 acres of waters within the project area. To date, a total of 16.30 acres of waters have been delineated within the DMP boundaries. The 15.71 acres is comprised of 1.08 acres of vernal pools, 0.77 acre of seasonal wetlands, 0.03 acre of wetland swale, 0.84 acre of stock pond, and 12.99 acres to Elder and Gerber Creeks.

The DMP will provide flood protection and water quality treatment for the development of the NVSSP area. The main components of the plan include flood control, detention of anticipated increased flows from the NVSSP area, treatment of urban runoff, and mitigation of impacts to wetland and wildlife habitats. The January 18, 2002, NVSSP DMP Update and Phasing document provides additional detailed information on the channel improvements, detention basins, water quality treatment and project phasing, which are summarized below. See Figures 2 & 3.

Flood Control Elder and Gerber creeks will be reconfigured for flood-flow capacities and public safety. The existing channelized creeks will be deepened, widened and re-contoured (Figures 4 & 5). Minimum channel depths and widths were established, then the design was broadened to incorporate wetland and wildlife habitats to allow for on-site mitigation. A low-flow channel will meander through wetland habitat on the channel bottom. Wetland/riparian benches and upland nesting islands will provide additional wildlife habitat throughout the redesigned corridors. In order to protect created habitats, the channel has been designed to allow for extensive vegetative growth and minimal maintenance.

Detention ponds have been designed to receive local runoff from adjacent lands. Some of the ponds will receive all the local runoff, while others will receive only piped runoff, with significant overflow going directly into the creek channel. Basins E26 and E24B are designed to receive all local runoff and Basins E24A, G41 and G46 are designed to receive piped and street runoff.

The storm water treatment portions of each pond are set at elevations below the ultimate channel bottom adjacent to the pond (Figure 4). The ponds are intended to remain wet, even during the earlier phases of development in which the channels have not yet been improved. Once the ponds fill to the designed water quality elevation, additional water will flow into the channel.

Proposed pumping is only for dewatering, not for flood control. Where pumps are proposed (G41, E24B, and G46), they will operate to drain the pond down to the top of the water quality pool at a 10 cfs pumping rate. This will drain a full pond slowly over a number of days. Ponds that do not have pumps will have sufficient gravity pipe drainage to drain the ponds once the main creek channels have receded low enough to not backwater the pipe outlets.

The only way for water to get into a pond from the channel will be over a high spilling weir. The pipe connections will have flapgates to prevent low-flow creek waters from entering the ponds. When flooding is high enough in the channel, the system will allow water to spill into the top portions of basins E24A, E24B, G41, and G46, and over a weir. These weirs will be set at different elevations during project phasing to match the adjacent channels' correlating flow/elevation characteristics.

Water Quality Most piped drainage will enter detention basins with water quality treatment features prior to entering the channel. In some areas, water quality swales will receive local runoff directly from contributing areas and slowly drain after passing over filtering vegetation into an improved creek channel (Figure 5). All local higher flows will flow over the top of the water quality pool and go directly to the adjacent flood control channel without being stored. Due to general characteristics of rainfall, low flows in the main creeks should not be entering the adjacent swales. While it is not likely, it is possible that the creeks could come up and spill into a water quality swale, as proposed, during significant storm events.

Recreation A meandering bike trail has been incorporated into the DMP as required by the NVSSP. The trail will be located on open space areas adjacent to the drainage channels and will be a minimum of 50 feet away from any constructed or preserved wetlands.

Mitigation The applicant has proposed the following mitigation. The DMP will mitigate for all wetland impacts onsite and in-kind with the exception of potential fairy shrimp habitat which may be mitigated off-site at an agency-approved mitigation bank. A draft wetland mitigation and monitoring plan has been submitted to the Corps for review.

Mitigation for impacts to Gerber Creek, Elder Creek and the stock ponds will occur on-site, by creation of wetland habitat within the reconstructed drainage corridors. The reconstructed drainage corridors will consist of approximately 25.63 acres of creek, wetland and riparian habitat. The reconfigured corridors will contain low-flow channels with adjacent wetlands and wetland/riparian benches. Impacts to scattered vernal pool, seasonal wetland and seasonal wetland swale will occur at a Corps and U.S. Fish & Wildlife Service (USFWS) approved mitigation bank.

The DMP will mitigate for all impacts to Gerber Creek, Elder Creek, and adjacent seasonal wetlands onsite within the newly constructed drainage corridors. Impacts to 13.83 acres of creek and stock pond habitat will be mitigated with the establishment of 25.63 acres of low-flow channel, channel bottom wetlands and wetland/riparian benches located throughout the drainage corridors. Riparian impacts will be mitigated in the drainage corridor adjacent to the low-flow channel and on benches to be incorporated into the side-slopes to achieve a variety of habitats. The channel has been designed have a natural appearance and will include varied slopes, bottom widths and occasional upland islands. These habitats will be protected in perpetuity within the DMP corridors which range in width from 130 to 400 feet. Minimum 50-foot buffer to all created and preserved habitats will maintained.

A total of 1.88 acres of seasonal wetlands, including vernal pools, will be affected by the DMP. Impacts to vernal pool wetlands may be mitigated off-site at a Corps and USFWS-approved mitigation bank. A total of 3.86 acres of preserved habitat (2:1 mitigation ratio) and 1.88 acres of created habitat (1:1 ratio) may be purchased to offset project impacts.

VINEYARD POINTE

The proposed project would result in adverse impacts to all 9.02 acres of waters. Approximately 8.41 acres of vernal pools and 0.09 acre of seasonal wetlands would be permanently impacted, and 0.52 acre of Gerber Creek would be temporarily impacted.

Residential Development The proposed project involves the construction of a residential subdivision, park, school, tank site, and flood control and road improvements, on a 179-acre parcel (See Figure 8). The residential development will include approximately 156 acres of primarily low-density single-family residential units (SFR) and a smaller area designated for medium density residential (MDR). The SFR land use category allows for a range of lot and dwelling sizes. The majority of the homes will be built on a network of residential streets that include connections to arterials and thoroughfares, but are not subjected to high traffic volumes and through traffic. The MDR land use category will allow for the development of condominium and townhouse dwelling units.

Parks The project area will include two neighborhood parks. The proposed parks will be approximately 5.8 acres and 1.8 acres in size. The 5.8-acre park will be located adjacent to the proposed school site in the northwestern corner of the project site. The 1.8-acre park will be located adjacent to a proposed future park location in the southeastern corner of the project site. Park amenities may include ballfields, picnic areas, tennis courts, basketball courts, and limited parking.

Road Improvements Bradshaw Road improvements will include the expansion of the road from a two-lane arterial to a six-lane thoroughfare. The road will continue to run north/south. Gerber Road improvements will include the expansion of the road from a two-lane arterial to a four-lane arterial. The improved road will run east/west from the Bradshaw Road intersection.

Flood Control See the NVSSP DMP project description above. A stormwater detention basin will be included in the project area for the primary purpose of intercepting and detaining peak stormwater flows conveyed within the drainage parkway channels. The applicant has stated that the detention facility is designed to reduce the ultimate 100-year peak flows to levels below existing levels, and although this basin is intended to be functional in design, it has been designed to appear as natural as possible.

The water quality detention basin is located north of Gerber Road, borders the Central California Traction Railroad on its west side, and incorporates part of Gerber Creek as it passes through the area. This 9.4-acre basin will operate as an off-channel dual-purpose basin for water quality treatment and storm water detention. Small frequent flows will be diverted out of the adjacent channel and into the basin by a small check dam, which will direct low flows through small inlet structures and drain into the basin. When the water quality volume has been filled, in-flow into the basin will be stopped by a float-activated control to reserve the flood control volume until the peak flood wave passes.

In some instances, there may be a storm drainpipe that outfalls into the creek just downstream of a basin. In the Vineyard Pointe project area, low-flows from the shed may be diverted into the basin directly from the pipe. This will be accomplished by constructing a small diversion weir within a manhole or junction structure located adjacent to the basin. Low flows will be diverted into a small pipe draining to the basin, while higher flows will overtop the weir and continue to the creek.

Components of the Master Plan that Vineyard Pointe would be required to implement include acquisition of right-of-way for a portion of the project, a detention/water quality basin, and improvements to Gerber Creek, within the Vineyard Pointe project. Gerber Creek will remain in its current location at the southwestern project boundary. However, all 0.52 acre of the creek will be directly impacted by the proposed deepening and widening. The reconstructed Creek will consist of a low-flow channel and wetland/riparian benches (Figure 3). In addition to the channel improvements in the project area, Gerber Creek will ultimately be widened upstream and downstream of the project site.

The vernal pools (8.41 acres) and the seasonal wetland swale (0.09 acre) will be filled in preparation of mass grading and installation of project infrastructure. The applicant has stated that instead of the creation of several isolated preserve areas within the Plan area, the applicant is proposing off-site mitigation for the project.

Additionally, the applicant has stated that implementation of the project will result in impacts to Swainson's hawk foraging habitat, which are regulated by the County of Sacramento and the California Department of Fish and Game. The nearest nesting site was found to be within 5 miles, but greater than 1 mile from the project site.

Mitigation The applicant has proposed the following mitigation. Off-site mitigation is proposed on a portion of the Gill Ranch property located in South Sacramento County (See Figure 12). The Gill Ranch property is currently under contract for purchase by Conservation Resources, LLC or affiliated entity and is being analyzed for the potential use as a mitigation bank. If suitable for this purpose the Gill Ranch could serve wetland and conservation requirements beyond those needed for the North Vineyard Station Specific Plan Area. The Vineyard Pointe project and future projects would facilitate the creation of a preserve area that could eventually connect the Clay Station Mitigation Bank on the west to the Laguna Creek Mitigation Bank and other open space areas to the east.

The Vineyard Pointe project would set aside approximately 640 gross acres to preserve 17.00 acres of existing vernal pool and seasonal wetland habitat and allow for the restoration of 8.50 acres of habitat on previously leveled land adjacent to Laguna Creek. Implementation of the off-site mitigation plan would augment the existing Laguna Creek Mitigation Bank resulting in a contiguous open space preserve area.

For Swainson Hawk mitigation the applicant has provided the following information. California Department of Fish and Game Management Conditions for Swainson's Hawk call for the mitigation of foraging habitat at the ratio of 0.75:1. That is, for every acre impacted, 0.75 acre will be preserved. At this ratio, mitigation for the Vineyard Pointe project should result in preservation of 134.25 acres of habitat.As a condition of the North Vineyard Station Specific Plan EIR, one of the following options must be implemented to mitigate for the loss of Swainson's hawk foraging habitat:

1. The project proponent shall preserve 0.50 acre of similar habitat for each acre lost within a ten-mile radius of the project site. This land shall be protected through a fee title or conservation easement (acceptable to the California Department of Fish and Game).

2. The project proponent shall enter in the formal consultation with the California Department of Fish and Game pursuant to Section 2081 of the California Fish and Game Code. A California Endangered Species Act Memorandum of Understanding and Management Agreement shall be completed prior to the issuance of any building permits for the site.

3. The project proponent shall submit payment of a Swainson's hawk mitigation fee per acre impacted to the Department of Planning and Community Development in the amount as set forth in Chapter 16.130 of the Sacramento County Code as such may be amended from time to time and to the extent that said Chapter remains in effect.

4. Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.

VINEYARD CREEK

The Vineyard Creek project would result in adverse impacts to 2.688 acres of waters. Approximately 1.49 acres of vernal pools would be permanently impacted, and 0.84 acre of Gerber Creek would be temporarily impacted. Additionally, 0.358 acre of waters, comprised of 0.280 acre of vernal pools and 0.078 acre of seasonal wetlands, would be permanently impacted by off-site projects described below.

Residential Development The proposed Vineyard Creek project involves the development of a housing subdivision located on a 108-acre parcel and related infrastructure.
The proposed residential development currently includes approximately 408 units of low-density single-family residential units (SFR) (Figure 14). The SFR land use category allows for a range of lot and dwelling sizes. The majority of the homes will be built on a network of residential streets that include convenient connections to arterials and thoroughfares, but are not subjected to high traffic volumes and through traffic.

Neighborhood Park The project area will also include a 2.5-acre neighborhood park located in the western portion of the project site. The park will provide neighborhood recreation, including such amenities as ball fields, picnic areas, tennis courts, basketball courts, and limited parking.

Flood Control See the NVSSP DMP project description above. A 5.3-acre stormwater detention basin is included in the project area for the primary purpose of intercepting and detaining peak stormwater flows conveyed within the drainage parkway channels. The detention facilities are designed to reduce the ultimate 100-year peak flows to levels to below existing levels.

Elder Creek will remain in its current location at the northwestern project boundary. However, the creek will be impacted by the proposed deepening and widening. The reconstructed creek will consist of a low-flow channel and wetland/riparian benched.

Off-site flood control will be needed for Elder Creek both upstream and downstream of the proposed project area. The channel will be constructed downstream approximately 3,200 feet to upstream of the project area, approximately 1,500 feet upstream of Florin Road. The applicant has stated, this is needed to eliminate the existing overtopping condition over Florin Road during a 100-year storm event. Elder Creek will be widened and realigned to create a drainage parkway west of the residential area. An example of the channel design concept is presented in Figure 15.

Off-Site Improvements The County of Sacramento has required a number of off-site infrastructure improvements to be implemented concurrent with project development. These improvements include

implementation of portions of the NVSSP DMP, and other infrastructure improvements, such as construction of Waterman Road from Gerber Road to Florin Road, improvements to Florin Road form the northeast corner of the project to the future intersection with Waterman Road, construction of a Water Treatment Facility southeast of where the future Waterman Road crosses the Central California Traction Railroad, and construction of a portion of Passillis Avenue (and associated underground utilities) west of the project site. This off-site work would result in an additional 0.358 acre of permanent impacts to waters, comprised of 0.28 acres of vernal pools and 0.078 acre of seasonal wetlands.

Mitigation Instead of the creation of several isolated preserve areas within the Plan area, the applicant is proposing off-site mitigation for the project. Off-site mitigation is proposed on a portion of the Gill Ranch property located in South Sacramento County. The Gill Ranch property is currently under contract for purchase by Conservation Resources, LLC or affiliated entity and is being analyzed for the potential use as a mitigation bank. If suitable for this purpose the Gill Ranch could serve wetland and conservation requirements beyond those needed for the North Vineyard Station Specific Plan Area. Mitigation for the Vineyard Pointe and Vineyard Creek projects and future projects would facilitate the creation of a preserve area that could eventually connect the Clay Station Mitigation Bank on the west to the Laguna Creek Mitigation Bank and other open space areas to the east.

AREA DESCRIPTION:

NVSSP DMP

The NVSSP Area is comprised of leveled and gently rolling terrain, and is situated at an elevation of approximately 40-80 feet above mean sea level. The primary vegetation community present on-site is annual grassland. Within the annual grassland are ephemeral features including vernal pools, wetland swales, and intermittent drainages. Drainage is directed towards the two creeks on the site; Elder Creek and Gerber Creek. Elder Creek forms the northwestern boundary of the NVSSP Area. Gerber Creek flows through the southern portion of the NVSSP Area and drains into Elder Creek at the southwest corner of the NVSSP Area. The site has been historically leveled and farmed in the past with various row crops and rice.

The annual grassland community is comprised of primarily non-native naturalized Mediterranean grasses. They include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), Mediterranean barley (*Hordeum marinum*), and medusahead grass (*Taeniatherum caput-medusae*). Other non-native herbaceous species in this community include hairy hawk-bit (*Leontodon taraxacoides*), filaree (*Erodium botrys*), pineapple weed (*Chamomilla suaveolens*), and yellow-star thistle (*Centaurea solstitialis*). A wide variety of native and non-native ornamental trees area scattered throughout the specific plan area. These include blue gum (*Eucalyptus globulus*), Valley oak (*Quercus lobata*), tree-of-heaven (*Ailanthus altissima*), Chinese pistache (*Pistacia chinensis*), Fremont's cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), walnut (*Juglans* spp.), sweet gum (*Liquidambar styraciflua*), and plum (*Prunus* spp.), among others.

The Corps has not verified wetland delineations for the entire NVSSP area. Portions of the NVSSP Area have been field delineated and field verified by the Corps of Engineers (Corps), other portions have been field delineated but have not yet been verified by the Corps. In addition, areas where permission to access the property has not been obtained have been delineated by aerial photograph interpretation.

Gerber and Elder creeks total 13.48 acres within the DMP project boundaries. Elder Creek enters the NVSSP area from the north, crossing under Florin Road approximately 1,000 feet east of the Central California Traction Railroad tracks. At this point, the creek carries runoff from just over 4,400 acres. The creek travels generally in a southwest direction along the west boundary of the NVSSP area for approximately 5,200 feet, where it leaves the Plan area after being joined by Gerber Creek. At its confluence with Gerber Creek, the tributary shed for Elder Creek is approximately 5,070 acres.

Gerber Creek first enters the NVSSP area under Gerber Road approximately 1,700 feet east of Bradshaw Road with a tributary area of approximately 1,340 acres. The creek generally travels west through the

site, temporarily leaving the NVSSP area approximately 1,100 feet west of Bradshaw Road before re-entering the NVSSP area just east of the railroad tracks. The creek exits the NVSSP area beyond its confluence with Elder Creek at the western boundary of the Plan area.

The two creeks are generally shallow (1 to 4 feet deep) and narrow (10 to 30 feet wide) within the NVSSP Area. The Creeks appear to have been realigned along property lines at several locations, most likely in connection with agricultural practices. The creeks maintain relatively low volume and would be seasonal in flow duration, if not for irrigation and urban water runoff. Supplemental water has somewhat extended the flow of the creeks into the dry season. Within the channels, isolated pools persist throughout the year. In general, the intermittent creeks exhibit bed-and-bank characteristics and are largely unvegetated due to the depth and scouring effects of flowing water. However, some hydrophytic vegetation may be present along the upper edges, and in areas where sediment accumulations provide a substrate suitable for plant establishment and growth.

Approximately 1.08 acres of vernal pools occur within the limits of the proposed project. Vernal pools are topographic basins within the grassland community and typically are underlain with an impermeable or semi-permeable hardpan or duripan layer. Vernal pools are inundated up to one foot through the wet season and are dry by late spring through the following wet season. The plant species composition within vernal pools is predominantly native annual species that include slender popcorn flower (*Plagiobothrys stipitatus*), bractless hedge hyssop (*Gratiola ebracteata*), annual hairgrass (*Deschampsia danthonioides*), dwarf wooly heads (*Psilocarphus brevissimus*), and Fremont's goldfields (*Lasthenia fremontii*).

In addition, approximately 0.87 acre of seasonal wetlands and 0.03 acre of seasonal wetland swale have been identified within the project area. Seasonal wetland swales are ephemerally wet linear features. The vegetative composition of the seasonal wetlands on-site is primarily comprised of non-native wetland generalist plants. These include ryegrass, Mediterranean barley, hyssop loosestrife (*Lythrum hyssopifolium*), and curly dock (*Rumex crispus*).

Two stock ponds totaling approximately 0.84 acre have been identified in the DMP project area. These aquatic features were not field mapped but appear to be excavated basins adjacent to the creeks. They likely fill to overflowing during the wet season and may be artificially maintained during the dry season. Further field analysis will be necessary to determine the jurisdictional nature of these two ponds.

Undeveloped pasture, nursery, and rural residential are located around the subject property. Other surrounding land uses are predominantly agricultural-residential (5-acre or larger lots). However, there are pockets of lower density development (2- to 3-acre lots) in the vicinity. Land to the east of the NVSSP area is primarily undeveloped and is designated agricultural-residential. The undeveloped land to the north of the eastern half of the Plan area is designated general agricultural. Land north of the western half is designated Natural Reserve (and contains the Elder Creek Recreation Area) and agricultural-urban reserve combined with aggregate resource area. Land north of the Plan area has been used primarily for grazing.

VINEYARD POINTE

The site is comprised of leveled and gently rolling terrain, and is situated at an elevation of approximately 60 feet above mean sea level. The primary vegetation community present on-site is annual grassland. Within the annual grassland are ephemeral features including vernal pools, wetland swales, and intermittent drainages. Gerber Creek meanders through the southwestern corner of the subject property. The western portion of the site has been historically leveled and farmed in the past with various row crops and rice. The historic rice fields were located in the northwestern corner of the property but have since been leveled and no evidence of rice farming remains. The eastern half of the site has been historically farmed with dry cereal crops such as oats but was not leveled. Through the entire property, active farming and tilling has not occurred for over five years, and the annual grassland community persists.

Undeveloped pasture, nursery, and rural residential are located around the subject property. Other surrounding land uses are predominantly agricultural-residential (5-acre or larger lots). However, there are pockets of lower density development (2 to 3 acre lots) in the vicinity.

The annual grassland community is comprised of primarily non-native naturalized Mediterranean grasses. They include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), Mediterranean barley (*Hordeum marinum*), and medusahead grass (*Taeniatherum caput-medusae*). Other non-native herbaceous species in this community include hairy hawk-bit (*Leontodon taraxacoides*), filaree (*Erodium botrys*), pineapple weed (*Chamomilla suaveolens*), and yellow-star thistle (*Centaurea solstitialis*). Several blue gum (*Eucalyptus globulus*), Fremont cottonwood (*Populus fremontii*), locust tree (*Robinia pseudoacacia*), and other non-native ornamental trees are scattered throughout the site, particularly at the southern boundary, where homes were once located.

A total of 9.02 acres of waters of the U.S. have been mapped on the project site (Figure 5). Approximately 8.41 acres of vernal pools are located within the project area. Vernal pools are scattered throughout the site. Vernal pools are topographic basins within the grassland community and typically are underlain with an impermeable or semi-permeable hardpan or duripan layer. Vernal pools are inundated up to one foot through the wet season and are dry by late spring through the following wet season. The plant species composition within vernal pools is predominantly native annual species that include slender popcorn flower (*Plagiobothrys stipitatus*), bractless hedge hyssop (*Gratiola ebracteata*), annual hairgrass (*Deschampsia danthonioides*), dwarf wooly heads (*Psilocarphus brevissimus*), and Fremont's goldfields (*Lasthenia fremontii*).

In addition, approximately 0.09 acre of seasonal wetland swale has been identified within the project area. The vegetative composition of the seasonal wetlands on-site is primarily comprised of non-native wetland generalists plants. These include ryegrass, Mediterranean barley, hyssop loosestrife (*Lythrum hyssopifolium*), and curly dock (*Rumex crispus*).

A portion of Gerber Creek (0.52 acre) passes through the Vineyard Pointe project site near the southwestern border. The perennial creek maintains relatively low volume and would be seasonal in flow duration, if not for irrigation and urban water runoff. Supplemental water has somewhat extended the flow of Gerber Creek into the dry season. Within the channel, isolated pools persist throughout the year. In general, the intermittent creek exhibits bed-and-bank characteristics and is largely unvegetated due to the depth and scouring effects of flowing water. However, some hydrophytic vegetation may be present along the upper edges, and in areas where sediment accumulations provide a substrate suitable for plant establishment and growth.

VINEYARD CREEK

The site is comprised of leveled pasture and is situated at an elevation of approximately 50 feet above mean sea level. Rural residences and a horse boarding facility are located at the northern portion of the site. The primary vegetation on-site is annual grassland. Within the annual grassland are ephemeral features (i.e., vernal pools). Elder Creek meanders through the northern and western portion of the subject property. The site has been historically leveled and farmed. Currently, the pasture north of the railroad easement is being grazed by horses and is no longer actively irrigated. The pasture immediately south of the railroad easement is being grazed by horses and is irrigated. A small pen of cows is located within this pasture. The southernmost pasture currently lies fallow and is not irrigated.

Undeveloped pasture, nursery, and rural residential are located around the subject property. Other surrounding land uses are predominantly agricultural-residential (5-acre or larger lots). However, there are pockets of lower density development (2- to 3-acre lots) in the vicinity. Future development is planned for much of the surrounding area.

The non-irrigated annual grassland community is comprised primarily of non-native naturalized Mediterranean grasses. These include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), Mediterranean barley (*Hordeum marinum*), and medusahead grass (*Taeniatherum caput-medusae*). Other non-native herbaceous species in this community include hairy hawk-bit (*Leontodon taraxacoides*), filaree (*Erodium botrys*), pineapple weed (*Chamomilla suaveolens*), and yellow-star thistle (*Centaurea solstitialis*). The irrigated pasture is comprised a mixture of native and non-native hydrophytic plants. These include Bermuda grass (*Cynodon dactylon*), curly dock (*Rumex crispus*), spiny-fruit buttercup (*Ranunculus muricatus*), ryegrass (*Lolium multiflorum*), Mediterranean barley (*Hordeum marinum*), and slender popcorn flower (*Plagiobothrys stipitatus*). The leveled irrigated pasture was not considered a potential water of the U. S., as it is likely that wetland hydrology, hydrophytic vegetation, and hydric soils would not persist in the absence of irrigation. Also, because this pasture has been leveled, there are no distinct topographic basins that, in the absence of irrigation, would pond water long enough during the growing season to exhibit wetland characteristics.

A total of 2.33 acres of waters have been mapped on the project site (Figure 16). Two relatively large vernal pools totaling 1.49 acres have been mapped within the non-irrigated pastures. Vernal pools are topographic basins within the grassland community and typically are underlain with an impermeable or semi-permeable hardpan or duripan layer. Vernal pools are inundated up to one foot through the wet season and are dry by late spring through the following wet season. The plant species composition within vernal pools is predominantly native annual species that include slender popcorn flower (*Plagiobothrys stipitatus*), bractless hedge hyssop (*Gratiola ebracteata*), annual hairgrass (*Deschampsia danthonioides*), dwarf wooly heads (Psilocarphus brevissimus), and Fremont's goldfields *(Lasthenia fremontii*).

Elder Creek (0.84 acre) crosses the northwestern corner of the project site. In general, Elder Creek exhibits bed-and-bank characteristics and is largely unvegetated due to its depth and the scouring effects of flowing water. However, some hydrophytic vegetation may be present along the upper edges, and in areas where sediment accumulations provide a substrate suitable for plant establishment and growth. Himalaya blackberry (*Rubus discolor*) thickets can be found along the banks at various reaches of the creek. Elder Creek exhibits relatively low volume flow and would likely be seasonal in flow duration if not for irrigation and urban water runoff. Supplemental water has extended the flows of the creek, which is intermittently wet throughout the year, including the dry season. Within the channel, isolated pools persist throughout the year.

ADDITIONAL INFORMATION:

NVSSP DMP

Federally Endangered or Threatened Species The applicant has stated the vernal pools on site may provide habitat for the Federally-listed vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and giant garter snake (*Thamnophis gigas*). Additionally, the applicant has stated that the U.S. Fish and Wildlife Service has determined that Elder and Gerber Creeks do not represent potential habitat for the federally-listed giant garter snake (*Thamnophis gigas*). The Corps initiated Endangered Species Act, Section 7, consultation with the U.S. Fish and Wildlife Service on September 12, 2003.

Cultural Resources The applicant has conducted a records search and no known historic properties were identified. However, undetermined historic properties may be exist within the project area.

Other Government Authorizations The applicant has stated a California Department of Fish and Game, Section 1603 agreement, and a request for water quality certification from the Central Valley Regional Water Quality Control Board, will be submitted. This project was included in the North Vineyard Station Specific Plan Environmental Impact Report (SCH #96032057), and the Notice of Determination was filed on November 5, 1998.

Alternatives The applicant has provided an alternatives analysis, which included the study of the following alternatives; leveed channels with detention, bypass channels with detention, wide naturalized creek with in channel detention, improved trapezoidal channel detention, improved naturalized channel with linear detention, and improved naturalized channels with point detention.

Related Documents
- January 18, 2002, Draft, North Vineyard Station Specific Plan Drainage Master Plan Update and Phasing
- November 15, 1998, Notice of Determination, North Vineyard Station Specific Plan
- December 31, 2002, Special-Status Species Assessment for North Vineyard Station Specific Plan, Drainage Master Plan, Sacramento County, California

VINEYARD POINTE

Federally Endangered or Threatened Species The applicant has stated the vernal pools on site may provide habitat for the federally listed vernal pool fairy shrimp (*Branchinecta lynchi,* federal threatened) and vernal pool tadpole shrimp (*Lepidurus packardi*, federal endangered). It is anticipated that project implementation (i.e. fill of vernal pools) represents potential affect to these species. Additionally, the applicant has stated that the U.S. Fish and Wildlife Service has determined that Elder and Gerber Creeks do not represent potential habitat for the federally-listed giant garter snake (*Thamnophis gigas*). The Corps initiated Endangered Species Act, Section 7, consultation with the U.S. Fish and Wildlife Service on March 26, 2003.

Cultural Resources The applicant has conducted a records search and no known historic properties were identified. However, undetermined historic properties may be exist within the project area.

Other Government Authorizations The applicant has stated a Lake and Streambed Alteration Agreement will be submitted to the California Department of Fish and Game for impacts to Gerber Creek. The Vineyard Creek project was included in the North Vineyard Station Specific Plan Environmental Impact Report (SCH #96032057). The Notice of Determination was filed on November 5, 1998. The applicant has also stated that a request for water quality certification will be submitted to the Central Valley Regional Water Quality Control Board.

Alternatives The applicant has provided an alternatives analysis, including no project alternative, on-site avoidance and minimization, and off-site mitigation. However, no off-site alternatives were evaluated in this analysis.

Related Documents
- January 18, 2002, Draft, North Vineyard Station Specific Plan Drainage Master Plan Update and Phasing
- October 10, 2003, Vineyard Pointe, Rare Plant Survey
- November 15, 1998, Notice of Determination, North Vineyard Station Specific Plan

VINEYARD CREEK

Federally Endangered or Threatened Species The applicant has stated the vernal pools on site may provide habitat for the federally listed vernal pool fairy shrimp (*Branchinecta lynchi,* federal threatened) and vernal pool tadpole shrimp (*Lepidurus packardi*, federal endangered). It is anticipated that project implementation (i.e. fill of vernal pools) represents potential affect to these species. Additionally, the applicant has stated that the U.S. Fish and Wildlife Service has determined that Elder and Gerber Creeks do not represent potential habitat for the federally-listed giant garter snake (*Thamnophis gigas*). The Corps will initiate Endangered Species Act, Section 7, consultation with the U.S. Fish and Wildlife Service as appropriate.

Cultural Resources The applicant has conducted a records search and no known historic properties were identified. However, undetermined historic properties may be exist within the project area.

Other Government Authorizations The applicant has stated a Lake and Streambed Alteration Agreement will be submitted to the California Department of Fish and Game for impacts to Elder Creek. The Vineyard Creek project was included in the North Vineyard Station Specific Plan Environmental Impact Report (SCH #96032057). The Notice of Determination was filed on November 5, 1998. The applicant has also stated that a request for water quality certification will be submitted to the Central Valley Regional Water Quality Control Board.

Alternatives The applicant has provided an alternatives analysis, including no project alternative, on-site avoidance and minimization, and off-site mitigation. However, no off-site alternatives were evaluated in this analysis.

Related Documents
- January 18, 2002, Draft, North Vineyard Station Specific Plan Drainage Master Plan Update and Phasing
- November 15, 1998, Notice of Determination, North Vineyard Station Specific Plan
- October 10, 2003, North Vineyard Station, Vineyard Creek, Rare Plant Survey

The District Engineer has made these determinations based on information provided by the applicant and on the Corps' preliminary investigation.

Interested parties are invited to submit written comments on or before **December 24, 2003**. Personal information in comment letters is subject to release to the public through the Freedom of Information Act. Any person may request, in writing, within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice may also be obtained through our web-site at http://www.spk.usace.army.mil/cespk-co/regulatory. If additional information is required for the NVSSP DMP, please contact George Booth at (916) 874-6851, or his consultant, Bjorn Gregersen, with ECORP consulting, at (916) 782-9100. If additional information is required for the Vineyard Pointe or Vineyard Creek projects, please contact Bob Shattuck, at (916) 783-3224, or his consultant, Bjorn Gregersen, with ECORP consulting, at (916) 782-9100. You may also contact the Corps Project Manager, Justin Cutler, at the letterhead address, e-mail: Justin.Cutler@usace.army.mil, or telephone (916) 557-5258.

Mark W. Connelly
Lieutenant Colonel,
Corps of Engineers
Acting District Engineer

Attachments (16 Figures)